

Short Report 1: Primate Anatomy & Adaptation Anth 223

Due date: Thursday September 22 via Moodle (do not email)

Objectives

The purpose of this assignment is to acquaint you with primate adaptation and diversity, skeletal anatomy, digital methods, and communicating results.

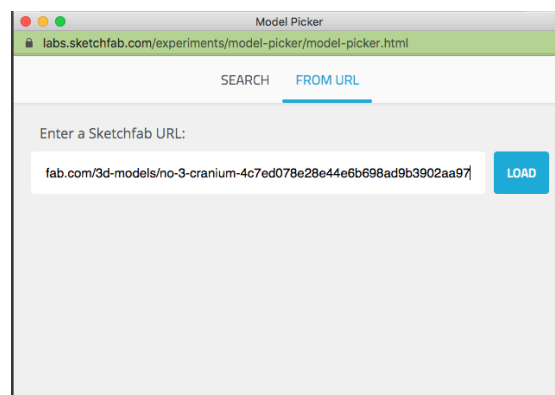
Assignment prompt

One of your shadier nerdy friends found out you're studying Anthropology, and got very excited to show you their latest eBay purchase—"real dinosaur skeletons!" they tell you. You first berate them for thinking that anthropologists study dinosaurs. But upon seeing the skeletons, you realize your anthropological training will come in handy after all. You suspect these are in fact primates (not dinosaurs), and you need to determine what kinds of animals these are. For better or worse, the report you write will be instrumental in fighting the illegal trade of endangered animals and educating your friend.

Instructions

Using course readings as guides (e.g., Fleagle and Etting chapters), determine as closely as you can whether each specimen is either a) Strepsirrhine, b) Platyrrhine, c) Cercopithecoid, or d) Hominoid. Your taxonomic diagnosis for each specimen must include at least two pieces of qualitative and at least two pieces of quantitative data, based on information from lecture and readings. Diagnoses must incorporate both the skull (including the brain endocast) and the postcranial skeleton.

These specimens are 3D surface meshes rendered from computed tomography (CT) scans, and can be accessed on the website Sketchfab ([here](#)). To take measurements, first copy the URL of the Sketchfab model you wish to measure. Then go to the Sketchfab measuring room ([here](#)), click the button "LOAD 3D MODEL," in the pop-up window that appears ("Model Picker"), click the "FROM URL" button, and then paste the URL into the space provided and click the "LOAD" button:



Your report should conclude with a discussion section, in which you discuss adaptive explanations for the variation in the diagnostic traits that you described.

To supplement your report, you must include two figures illustrating each of the qualitative observations in your diagnoses (4 specimens x 2 qualitative data each = 8

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figures). Figures can be made simply with screen shots of the specimen in Sketchfab. Each figure could include a caption directing attention to the key feature in question. Figures and their captions should appear appended to the end of the report, after the bibliography, and be referenced in the text. These figures do not count toward the 5 page target.

Writing style, formatting, and bibliography

Reports should be approximately five double-spaced pages, with 12-point Times New Roman font, and 1" margins all around. The text should be written using complete sentences and paragraph formatting. You may write in either the first person (e.g., "I determined that...") or third person (e.g., "It was shown that..."), but please use only one and stay consistent throughout.

Do not include a title, header, or any superfluous metadata at the beginning, such as the course title or my name.

Reports should be divided into the following sections

- Introduction: a brief paragraph outlining the problem and what will follow in the report
- Results: an explanation of each specimen diagnosis, and how different traits led you to the diagnosis; probably each specimen should be allocated its own paragraph
- Discussion: adaptive explanations (based on evidence!) for the various diagnostic traits; you don't necessarily need to discuss *every single* trait given the spatial limitations of the report, but you don't want to omit anything important, either.
- Conclusion: a brief paragraph summarizing the outcome with a short statement of the broader significance, future directions following from the work, etc.

Do not include section headers or extra lines between sections, but rather your writing should flow from one section to another, from one paragraph to another.

All information coming from external sources needs to be properly cited. Use the APA style for in-text citations and the bibliography at the end of the report. Bibliography does not contribute to the page count. Regarding in-text citations, simply provide author surname(s) and year published, and do not include superfluous information such as article or book title, author credentials and qualifications. For example, "Strepsirrhines have greater reliance on olfaction, and so larger noses (Fleagle, 1999)."

See the "Bio Anthro Writing Style Guide" for additional conventions and standards to follow.

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Report Checklist

- No superfluous metadata; report starts with text and no headers
- Introductory paragraph (brief) providing background and motivation of report
- Diagnoses (results)
 - Skeleton 1
 - 2 qualitative features
 - 2 quantitative observations
 - Skeleton 2
 - 2 qualitative features
 - 2 quantitative observations
 - Skeleton 3
 - 2 qualitative features
 - 2 quantitative observations
 - Skeleton 4
 - 2 qualitative features
 - 2 quantitative observations
- Brief discussion of adaptive significance of these features
- All of the above ~ 5 double-spaced pages
- Formatting
 - 1" margins
 - 12 point Times New Roman font
 - Paragraph format
- Bibliography
 - References properly cited in text
 - Bibliography including all references at end
- Figures
 - Two figures for each qualitative trait for all four specimens = 8 figures
 - Figure captions telling me what I'm supposed to be looking at

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Assessment criteria

- A Applies to papers that are superior in their development and expression of ideas. An “A” paper may not be flawless or totally error-free, but it does all of the following:
- correctly identifies or diagnoses the taxon of each specimen, with correct, appropriate and well-explained criteria
 - engages the topic thoughtfully and imaginatively, and presents more than assignment minima specified in the instructions
 - develops ideas using a logical structure; it has sound organization and offers detailed analyses of the evidence cited to support arguments
 - is easy to read, well proof-read, and makes few or no mechanical mistakes (i.e. spelling, punctuation, grammar, scientific conventions, etc.)
 - adheres fully to the Bio Anthro Writing Style Guide
- B Applies to good, solid and competent writing and analysis. A “B” paper does most of the following:
- responds intelligently to the topic but is incomplete; ideas do not progress much beyond readings or classroom discussions
 - misidentifies a specimen, or misinterprets some features or diagnostic criteria
 - includes 2 each of qualitative and quantitative criteria in diagnoses, but the qualitative and quantitative are somewhat redundant of one another for the specimen
 - uses clearly written sentences, though the style may be slightly awkward at times
 - makes some minor mechanical errors, but no major ones; does not adhere to Bio Anthro Writing Style Guide
- C Applies to satisfactory submission. A “C” paper usually:
- responds incorrectly or incompletely to the prompt; it may have weak or fuzzy explanations and show some confusion about the topics
 - misidentifies specimens and misinterprets anatomical features or criteria
 - is difficult to read, e.g., some sentences may not accurately or clearly convey the ideas being presented, may bounce from topic to topic without clear connections or transitions
 - makes many minor mechanical errors and distracting mistakes (words are missing, diction is inconsistent); proofreading is weak
- D Applies to less-than-satisfactory papers. These papers usually lack the coherence and developments of C papers and exhibit significant deficiencies. Also, a D paper often:
- is incomplete, missing several required components specified in the instructions
 - presents incorrect information or interpretations
 - shows little sense of structure and organization
 - makes frequent and serious mechanical errors that impede communication and understanding
- F Applies to papers with serious weaknesses in many errors. An F paper shows severe difficulties in writing. It:
- offers little substance and may disregard the assignment instructions
 - lacks any focus, organization, or development
 - misuses terms and concepts, and contains abundant mechanical errors
 - is plagiarized in part or as a whole